Topic:	Valdez Public Meeting	Valdez Civic & Convention Center Valdez, Alaska
Date:	May 12, 2009	
Time:	4:00 PM - 7:30 PM	
Purpose:	The intent of this meeting was to solicit feedback on the Proposed Risk Assessment Methodology from public stakeholders who have interests in the existing Alaska oil and gas industry infrastructure, within the Valdez area.	
Attendees:	Public Attendees: Stan Stephens Donna Schantz Judy Miller	
	State Agency Project Team Attendees: Ira Rosen, ADEC Allison Iverson, PSIO Tim Robertson (Nuka Research)	
	Project Team Attendees: Bettina Chastain Jennifer Cambron	

VALDEZ PUBLIC WORKSHOP SUMMARY

1. Introductions

A total of 8 individuals were in attendance including members of the project team, members of the State Agency Oversight Team (SAOT), local businesses, NGOs, and the public. The meeting began with an introduction by Ira Rosen, ADEC Project Manager, on the project background and status. Tim Robertson of Nuka Research communicated the objectives and ground rules for the meeting, and began introductions of those in attendance. The purpose of the meeting was to obtain input from the public on the Proposed Risk Assessment Methodology released in March 2009. The report describes the methodology inputs, infrastructure scope, technical methodology and a description of how the risk assessment results will be analyzed and compiled into a risk profile.

A presentation was given by Bettina Chastain. Opportunity was given to meeting participants to provide oral comments during the meeting or written comments via email, fax, and mail. It was conveyed that all comments are due no later than June 2, 2009.

2. Proposed Risk Assessment Methodology Presentations

Overview Presentation

Bettina Chastain, the EMERALD Project Manager, gave an overview of the background, objectives, and current status of the project, including an overview of the scope of the infrastructure included in the risk assessment, a summary of the stakeholder consultation process and other inputs to the Proposed Methodology, and other details of the Proposed Methodology developed for the Alaska Risk Assessment.

The entire presentation is posted on the project website at:

http://www.dec.state.ak.us/spar/ipp/ara/documents/ 0905GeneralPublicOverview ProposedRiskAssessmentMethodology v002 3.pdf

VALDEZ PUBLIC WORKSHOP SUMMARY

3. Questions, Answers, and Comments

Questions were taken both throughout the presentation and following the presentation. Questions asked and comments from public attendees are denoted by a "Q" or a "C" in the following discussion, while "A" represents the State or Project Team's effort to address the question or comment.

Q: Hasn't it been difficult getting information/data from industry?

A: There have been varying degrees of cooperation from industry folks. For some facilities we have more data, and we may get full cooperation, but for others, information is limited.

C: So it's based on data that industry is willing to provide.

A: We will also be using published industry data from multiple sources in different industries. You apply this type of generic data when you don't have specific data, and modify it based on Alaska-specific factors.

Q: How do you apply data that is not specific to Alaska?

A: Data from industry outside of Alaska is applied based on certain parameters and assumptions. You adjust these based on Alaska-specific factors.

C: Other places do not have the same conditions, e.g. the heavy crude. This creates a whole new risk that you just won't find by looking at data from Texas, Africa, or the North Sea, etc. This is a very unusual pipeline here in Alaska, a great engineering feat but it has major problems. I don't believe a literature search for data outside of Alaska is valid for this risk assessment, and many other people share this opinion.

Q: Do you know that this method is appropriate based on other risk assessments that have been done in the world?

A: The level of specificity that can be achieved will be affected. You have to have a basis for your data from somewhere, and you either have industry specific data from operators, their historical databases, etc. –OR- you use generic data for the oil and gas industry, and adjust it for specific conditions, e.g. weather, etc. In the risk management world, nobody ever has perfect, specific data, and it is never as good as getting data from different industries as well. People don't always keep good records. You can make engineering judgments on whether data can be adjusted up or down based on conditions. Some areas have good data, some do not. Failure data can often be used for common types of failures, which is a good basis for this no matter what industry you're in (e.g. a common valve failure). When weather can have an impact, underground conditions (permafrost), it would be better to have site specific data, but often times you don't have that. We are not reinventing the wheel in the area of risk assessments, some type of data is required in order to be able to assess the failure frequency, or likelihood component for assigning a risk ranking.

Q: Are you treating all waterways equally? Will there be more emphasis on some areas (e.g. Copper River)?

A: There are 4 contributing factors that will be used to calculate relative scores for each identified environmental scenario of interest, including: Sensitivity of the surrounding external environment, Composition/type of fluid stream that is released (hydrocarbons or seawater), Release quantity or volume of fluid released, and the Recoverability of spill volume and remediation efficiencies. Moving waterways are at the top of the Environmental Sensitivity Categories scale, and will be treated equally as far as this scale is concerned. However, you have to consider the other factors that will be involved in scoring as well.

Q: How will spills under ice on a river be assessed?

A: In our model, it will get the highest ranking on the Environmental Sensitivity scale for a spill to a waterway, and have a negative ranking for limited Recovery/Remediation Capabilities and duration. It would get the top of the rung in terms of risk. If remediation is considered possible, the ranking will be lower.

Q: What are your procedures for reviewing best practices?

A: During Phase 1, we developed a list of all past studies (similarly large in scope to this study), risk assessment documents, and standards for risk assessments, to be considered in the development of the risk assessment methodology. This list is included in the Interim Report. We reviewed and summarized this information for reference.

Q: I mean, have you traveled up to the Slope to review their practices, work orders, etc.?

A: The purpose of Phase 1 was not to look at specific infrastructure, but to look at risk assessment practices and develop a methodology.

Q: Don't you have to look at what's going on to determine the risk?

A: The work to be done to determine risks for Alaska infrastructure will be performed during Phase 2 – Implementation. The purpose of the work completed so far has been to develop the methodology which will be used during Phase 2.

Q: Did you physically examine production lines? Are you going to do this? How can you judge what the risk is without going out to the field?

A: That is not how the project will be conducted.

Q: I'm not understanding the distinction of what you included vs. what you excluded.

A: We came up with a list of every piece of equipment/component of facilities that are parts of infrastructure that we need to look at. (What [commenter] is referring to is whether you will actually be physically looking at the components that are in scope.) During Phase 1, we developed a list of the components that will be included and the methodology of how these components will be assessed. We are not physically planning to look at the condition of the equipment, but we will be gathering data on this equipment from sources that are available.

Q: How does this (referring to the North Slope infrastructure component slide) determine the risk for the North Slope? Have you looked at industry's budgets for the year, the human factors (overworking people so they're catnapping on the job)? Those are all issues that should be considered.

A: Those elements will be considered during implementation. The purpose of Phase 1 was to determine the components that are in scope and the methodology to be used to assess them.

C: I don't think that is what a risk assessment is supposed to do.

Q: In some of your meetings, what have the major themes been as far as "where do you put your million dollars that you have to spend"?

A: The Interim report has more information on these major themes. For example, spills to water came up quite often.

Q: Have you run any scenarios yet?

A: No particular ones have been run yet.

C: Here is an example: at the East Metering facility, there was a pigging event that resulted in a release. If the East Metering facility were to explode this would take out the whole pipeline. This is one that is very important.

- **A:** If you have specific examples, it would be valuable for you to write these things down and provide this information to the project team for evaluation.
- **Q:** How does the spill in 2006 fit into this?
- **A:** That particular spill would be screened out based on the reliability screening scale. The 2006 spill took out half of Prudhoe for a short period of time (less than two weeks).
- **C:** Does the reliability model show that for highest category consequence, for a 2 month shutdown, you would only lose 2 months production, or did you also consider that if you shut in production, some of those wells may never produce again? In January, I understand that we were pretty close to irretrievable consequences. You can't just turn it off and then on again. I think this is an extremely significant consequence that you might need to go back and revisit.
- **A:** No, the methodology does not currently take this into account. You would likely want to include this. Thanks for your input, we will consider this. Ultimately, this could be considered in the actual consequences itself.
- **C:** Can we talk about Natural Hazards? The pipeline was built 30 yrs ago, and has major problems, e.g. bending. If you walk the pipeline, you'd be amazed at the problems that exist. Alyeska says this is a slow process. The pipeline was designed for an 8-8.5 earthquake and will no longer meet those standards. This has to be a part of the risk assessment. On the other side of the Gulkana it is designed for 8.5, but if there is an earthquake (e.g. the Denali fault), it would fail. This is my concern with this project. You can't know the actual risks of infrastructure from a literature search.
- **A:** We would like to get input on areas that have been previously compromised. We have received a lot of documentation, reference sources, and information from the public on specific Alaska infrastructure concerns.
- **C:** Issues like corrosion and bending in the line won't come from Alyeska. It would take \$30 million to do this right. Nothing against where you're trying to go, but I don't think this is a true risk assessment.
- **A:** The scope of this study is very large. The results from this study are going be at a higher level.
- **C:** All waterways are not equal. There is no way to clean up a spill on a river. What you have to look at is "how do you prevent the spill?" Any spill of any kind to Copper River is not acceptable. If we're going to give the legislature and governor information, it should be accurate and real. This is not acceptable and I'm upset with what is going here. I understand that the budget is not enough. If there is damage to Copper River, it is a sin. We need to look at what is actually wrong with the pipeline, not a literature search. There are issues with valves leaking. This doesn't fit you can put it on paper and make a profit off of it, but it's not real.
- **C:** The Pump Station 1 incident in January would have been a catastrophic event that would have shut [Alaska production] down, period. You can't do a risk assessment without physically examining infrastructure. We need to know what the real risk is.
- **C:** The frustrating thing for me was I thought we were actually going to examine the facilities. This is a paper examination, not physical. There are so many areas where you can have physical issues, and by not physically examining these, it won't be an honest picture to the governor or citizens of Alaska. The results will show the possibilities only. I would stop right here and take a new look at the funding. This won't get the true answers. Let's just be honest and quit here to determine whether this should be done in a different way.
- C: It is clear that people have the wrong idea about what this risk assessment will do.
- **A:** Yes, what many people are most likely thinking of is more of a "Condition Assessment," instead of a risk assessment.
- C: Efforts should be continued to do a more specific assessment of risk. As far as operational

risks go, it's more than just operating procedures and inspections, it's general oversight to make sure these things are being done. I would hope that this would come out of this assessment.

A: The difficulty is how to turn this concept into a modification of the methodology.

C: An RCAC would help on the North Slope. Having presence of regulators helps keep industry on track. There is no magic solution, but these things would help.

C: Next time you should consider going to Cordova instead of Valdez.

Attachments:

Proposed Risk Assessment Methodology Overview Presentation